What is claimed is:

1. A method of generating a predetermined field of cavitation around a remote target in an underwater environment, said method comprising the steps of:

identifying a remote target in an unconfined underwater location;

generating at least two acoustic beams from an underwater acoustic source; and

controlling said at least two generated acoustic beams to intersect with each other at said identified remote target location and whereby a cavitation field is created at said intersection.

2. The method according to claim 1 wherein said remote target location is in the range of 100m to 1 km from the acoustic source.

3. The method according to claim 1 wherein said remote target location is at least 100m from the acoustic source.

4. The method according to claim 1 wherein said remote target location is no more than 1 km from the acoustic source.

5. The method according to claim 1 wherein said acoustic beams are generated in a range frequency of from 10KHz to 15KHz.

6. The method according to claim 1 wherein said acoustic source is located onboard an underwater support vessel.

7. The method according to claim 1 wherein three acoustic beams are generated.

8. The method according to claim 1 wherein said at least two generated beams are generated to maximize cavitation at said identified remote target location.

9. A method of generating a predetermined field of destructive cavitation around a remote target in an underwater environment, said method comprising the steps of:

identifying a remote target location;

generating an array of intersecting acoustic beamforms, each beamform producing a beam at peak power output, from an acoustic source; and

controlling said array of intersecting beamforms to intersect at said identified remote target location

and thereby creating the field of destructive cavitation at said intersection.

10. The method according to claim 9 wherein said remote target location is in the range of 100m to 1 km from the acoustic source.

11. The method according to claim 9 wherein said remote target location is at least 100m from the acoustic source.

12. The method according to claim 9 wherein said remote target location is no more than 1 km from the acoustic source.

13. The method according to claim 9 wherein said acoustic beamform is generated in a frequency range of from 10KHz to 15KHz.

14. The method according to claim 9 wherein said acoustic source is located onboard an underwater support vessel.

15. The method according to claim 9 wherein said array includes at least two acoustic beamforms.

16. A method of generating a predetermined field of destructive cavitation around a remote target in an underwater environment, said method comprising the steps of:

identifying a remote target location;

computing a focal point location about said identified remote target location;

computing beam parameters for said focal point location; and

generating at least two acoustic beam parameters whereby cavitation is generated at said focal point location.